

(For JSPS Fellow)

Form B-5

Date (日付)

2/07/2014 (Date/Month/Year: 日/月/年)

Activity Report -Science Dialogue Program-
(サイエンス・ダイアログ事業 実施報告書)

- Fellow's name (講師氏名): Mohammad H. N. Al Assadi (ID No. P13751)
- Participating school (学校名): Yamashiro High School
- Date (実施日時): 13/06/2014 (Date/Month/Year: 日/月/年)
- Lecture title (講演題目): (in English) Science Dialogue Australia & Thermoelectrics
(in Japanese)
- Lecture summary (講演概要): Please summary your lecture 200-500 words.

The lecture consisted of two parts. First a broad introduction about Australia, its economy, cities and culture. This part of the lecture went on to explain the scientific foundation in Australia and the existing scientific collaboration between Australia and Japan. I also touched on the topic of JSPS's funding international researchers as a means to increase Japan's scientific exchange with the rest of the world and how that will benefit Japan's economy. In the second part of the lecture I focused on the topic of my research; the thermoelectrics. While keeping all concepts simple and accessible to high school level scientific knowledge, I explained the huge energy demand of advanced economies such as Japan and Australia. I continued that a solution to energy production may be the thermoelectric materials which convert heat to electricity. I fully explained this concept using graphical drawings and images from real life application. Then I demonstrated how currently thermoelectric technology is being used in cars, satellites and air conditioning units. I think the students found that fascinating that the same technology was applied in both home appliances and space exploration programs. I concluded the lecture with an extended Q&A of 20 minutes and made sure there was a conversation with each and every bench.

- Language used (使用言語): English
- Lecture format (講演形式):
 - ◆Lecture time (講演時間) 70 min (分), Q&A time (質疑応答時間) 20 min (分)
 - ◆Lecture style (ex.: used projector, conducted experiments)
(講演方法 (例: プロジェクター使用による講演、実験・実習の有無など))
Powerpoint presentation with the use of whiteboard for explaining some concepts and

equations.

- ◆ Interpretation (ex.: Assistance by accompanied person, provided Japanese explanation by yourself) (通訳 (例: 同行者によるサポート、講師本人による日本語説明))

I used a printed hand out of the translation of the difficult words and brought them to the lecture and made sure every student understood the word that seemed difficult.
School's English Teacher Mr Akihiro Ohmichi also helped during the presentation.

- ◆ Name and title of accompanied person (同行者 職・氏名)

School's English Teacher Mr Akihiro Ohmichi

- ◆ Other note worthy information (その他特筆すべき事項):

None. Thanks

- Impressions and opinions from accompanied person (同行者の方から、本事業に対する意見・感想等がありましたら、お願いいたします。)

No particular comments, thanks.